

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:) Confirmation No.: 3205
Hajime KIMURA) Group Art Unit: 2629
Serial No.: 10/822,848) Examiner: Ke Xiao
Filed: April 13, 2004)
For: SEMICONDUCTOR DEVICE)
)

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Honorable Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The present *Request* is filed pursuant to the provisions of the Pre-Appeal Brief Conference Pilot Program (1296 Off. Gaz. Pat. Office 67 (July 12, 2005); extended January 10, 2006). The Official Action mailed June 16, 2010, and the *Advisory Action* mailed November 1, 2010, have been received and their contents carefully noted. Filed concurrently herewith is a *Request for Two Month Extension of Time*, which extends the shortened statutory period for response to November 16, 2010. Also, filed concurrently herewith is a *Notice of Appeal*. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. The Official Action includes improper rejections, errors in fact and omissions of essential elements required to establish a *prima facie* rejection.

Claims 1-127, 129 and 130 are pending in the present application, of which claims 1-7, 100 and 101 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 1-61, 68-127, 129 and 130 as obvious based on the combination of Japanese Application No. 11-125841 to Chiyou and U.S. Patent No. 7,196,699 to Kubota. Claims 62-67 are rejected as obvious based on the combination of Chiyou, Kubota,

and U.S. Patent 6,246,180 to Nishigaki. The Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Please incorporate by reference the summary of the claimed subject matter and the arguments in the After Final Response filed October 18, 2010. The claims of the subject application recite, for example, a plurality of pixels comprising a sensor portion and a liquid crystal element portion; and a second circuit, configured to select the sensor portion or the liquid crystal element portion based on a timing signal from a first circuit, such that the sensor portion is not selected when the liquid crystal element portion is selected, and the liquid crystal element portion is not selected when the sensor portion is selected. One object of the present invention is to "provide a semiconductor device in which irregularities in brightness are not caused in a read-in image. In addition, an object of the present invention is to provide a semiconductor device that has been made smaller and thinner." ([0011] of U.S. Publication 2004/0189567, which corresponds to the subject application).

The Official Action asserts that Chiyou discloses a pixel portion (Figure 10), a first circuit ("all shift registers that are part of the drivers are considered the first circuit"), wherein each pixel comprises a sensor portion (1001) and a liquid crystal element portion (1002). The Official Action concedes that Chiyou does not teach the claimed second circuit. Kubota is relied upon to allegedly teach the claimed second circuit in Figure 75. The Official Action further concedes that Chiyou and Kubota fail to teach "wherein the second circuit is configured to select the sensor portion or the liquid crystal element portion based on the timing signal such that the sensor portion is not selected when the liquid crystal element portion is selected, and the liquid crystal element portion is not selected when the sensor portion is selected." The Official Action asserts that that Chiyou in view of Kubota "instead teaches that the display and sensing elements operate simultaneously and independently." However, the Official Action does not appear to provide any evidence in support of this position.

The Official Action relies on Official Notice to teach that it is well known "to operate *independent* display and sensor portions as claimed specifically that the sensor portion is not selected when the light emitting portion is selected, and the light emitting element portion is not selected when the sensor portion is selected" and that "[i]t would have been obvious ... to allow

the sensor and the display to operate independently and exclusively from each other in order to save power" (Id.; emphasis in original).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. The prior art, when taken alone or in combination, fails to disclose or suggest the claimed second circuit. Kubota is relied upon to allegedly teach the claimed second circuit in Figure 75. However, Kubota discloses that Figure 75 "shows another example of the construction of the scanning signal line drive circuit of the image display device of the present invention," and describes the operation of the circuit of Figure 75 as follows:

In the construction of the scanning signal line drive circuit shown in FIG. 75, the scanning signal line drive circuit is driven by a supply voltage of 15 V, and the amplitude of each of input signals FR1 and FR2 is 5 V. This can be achieved by using the logical circuit of the present invention for a non-disjunction circuit LS_NOR to which the input signals FR1 and FR2 are inputted.

Kubota is completely silent as to the claimed feature that the second circuit is configured to select one of the sensor portion or the liquid crystal portion and in fact does not appear to disclose any circuit configured to so operate. Rather than present any cogent line of reasoning or explanation for modifying the hypothetical combination of Chiyou and Kubota, the Official Action appears instead to assert that Chiyou in view of Kubota "teaches that the display and sensing elements operate simultaneously *and* independently" and rely on Official Notice to conclude that it would be obvious that the sensor portion is not selected when the light emitting portion is selected, and the light emitting element portion is not selected when the sensor portion is selected to save power.

Applicant traversed the use of Official Notice and in response, the Advisory Action asserts that "The examiner contends the issue of being well known citing a wall display with multiple panels, if only one panel needs to be used, the other panels can be shut down in order to save power such a system is well known in the art"

Such comments are clearly deficient and insufficient to maintain a *prima facie* case of obviousness. First, any reference to a "wall display" in support of the rejection is wholly improper as there does not appear to be any prior art of record disclosing these features and there is no evidence that such system was known at the time of the present invention, or what relevance this hypothesized system has to the present invention, as a whole.

Second, the use of Official Notice in the context of the present rejection is misplaced. As previously noted, Official Notice is only proper where the facts asserted are capable of instant and unquestionable demonstration as being well-known and are not subject to the possibility of rationale disagreement. It completely strains credulity to assert, as in the Official Action, that "to operate *independent* display and sensor portions as claimed specifically that the sensor portion is not selected when the light emitting portion is selected, and the light emitting element portion is not selected when the sensor portion is selected" is capable of instant and unquestionable demonstration as being well-known and is not subject to the possibility of rationale disagreement. Since Official Notice forms the foundation for rejecting this feature of the claimed invention and since Official Notice is clearly improper on its face to justify such a rejection, a *prima facie* case of obviousness simply cannot be maintained.

Finally, there is no reasonable expectation of success in combining the reference teachings and/or modifying the combined device to achieve the present invention. The Official Action is wholly silent as to how one of ordinary skill could combine the circuit of Figure 75 of Kubota with the device of Chiyou to achieve the present invention and instead appears to simply assert that this hypothetical combination would somehow result in reduced power consumption. However, neither the Official Action nor the Advisory Action articulates any cogent line of reasoning as to how the circuit of Figure 75 in Kubota could be combined with Chiyou to realize any reduced power consumption with any reasonable expectation of success. There is no explanation why one of ordinary skill in the art would look to Figure 75, which is one of 82 figures in Kubota and the subject of minimal discussion in the specification, to modify the device of Chiyou, let alone how such modification could be reasonably made to achieve the desired effect of reduced power consumption. This omission is particularly egregious in light of the above discussion directed at the improprieties of Official Notice since Kubota says nothing about the use of Figure 75 to select a sensor portion or a liquid crystal element portion as claimed. Even if a person of ordinary skill were somehow motivated to combine Chiyou and Kubota, the claimed second circuit configured to select the sensor portion or the liquid crystal element portion based on a timing signal from a first circuit, such that the sensor portion is not selected when the liquid crystal element portion is selected, and the liquid crystal element portion is not selected when the sensor portion is selected simply would not result without

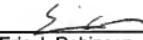
further, unexplained modifications to the combined device. For these further reasons, a *prima facie* case of obviousness cannot be maintained.

Therefore, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 are in order and respectfully requested. Since the Official Action has not presented a *prima facie* rejection, at the very least, the Examiner's arguments are not suitable for appellate review. The Applicant respectfully requests that the present application be allowed on the existing claims pursuant to the provisions of the Pre-Appeal Brief Conference Pilot Program (1296 Off. Gaz. Pat. Office 67 (July 12, 2005); extended January 10, 2006).

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,


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